

Common Core Standards - Resource Page

The resources below have been created to assist teachers' understanding and to aid instruction of this standard.

Domain	Standard: S.ID.6a - Fit a function to the data; use functions fitted to data to solve problems in the context of the data. Use given functions or choose a function suggested by the context. Emphasize linear, quadratic, and exponential models. *(Modeling Standard)
<u>Interpreting Categorical and Quantitative Data</u> Summarize, represent, and interpret data on two categorical and quantitative variables	<p><u>Questions to Focus Learning</u></p> <p>How can the relationship between two quantitative variables be described?</p> <p>Mathematical functions can describe the relationship between two quantitative variables.</p> <p><u>Student Friendly Objectives</u></p> <p><i>Reasoning Targets</i></p> <p>I can describe the relationship between two variables in a scatterplot. I can use a function to solve problems in the context of the data.</p> <p><i>Product Targets</i></p> <p>I can represent data on a scatterplot. I can create a linear, quadratic, or exponential function to model the relationship between two variables.</p> <p><u>Vocabulary</u></p> <p>dependent variable exponential function function independent variable linear function quadratic function regression scatterplot</p>

	<p><u>Teacher Tips</u></p> <p><u>UNIT 3</u> Building on work in Grade 8, students take a more sophisticated look at using functions to model the relationship between two numerical variables. In addition to fitting a line or curve to data, students assess how well the model fits by analyzing residuals.</p> <p>Limit to linear relationships.</p> <p><u>UNIT 5</u> Extend work in Unit 3 to include informally fitting quadratic and exponential models to data.</p> <p><u>Vertical Progression</u></p> <p>S.ID.6b - Informally assess the fit of a function by plotting and analyzing residuals. *(Modeling Standard) S.ID.6c - Fit a linear function for a scatter plot that suggests a linear association. *(Modeling Standard) S.ID.7 - Interpret the slope (rate of change) and the intercept (constant term) of a linear model in the context of the data. *(Modeling Standard) S.ID.8 - Compute (using technology) and interpret the correlation coefficient of a linear fit. *(Modeling Standard) S.ID.9 - Distinguish between correlation and causation. *(Modeling Standard)</p>
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The above information and more can be accessed for free on the [Wiki-Teacher](#) website.

Direct link for this standard: [S.ID.6a](#)